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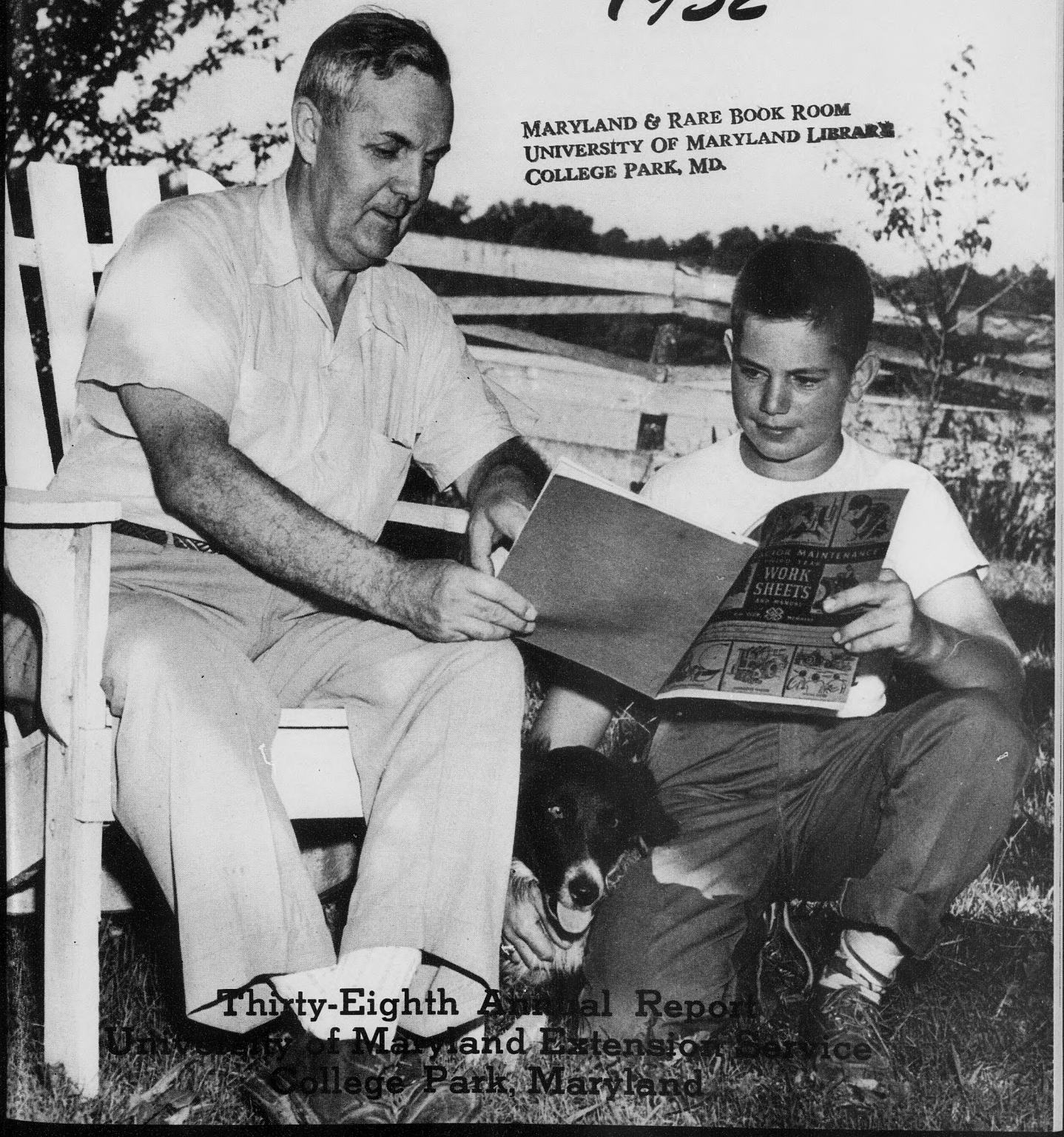

Thirty-Eighth Annual Report
University of Maryland Extension Service
College Park, Maryland

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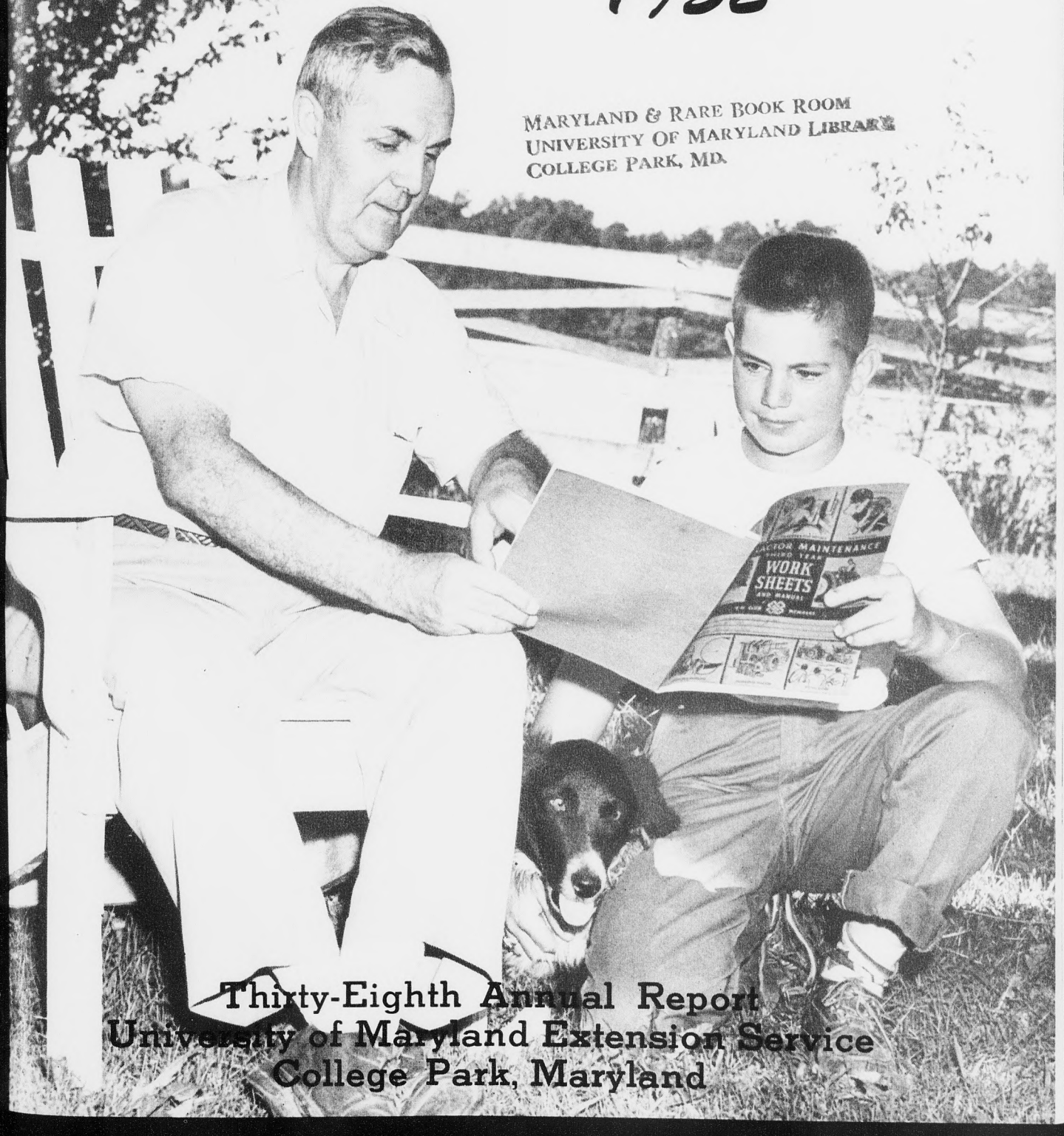

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ACKNOWLEDGMENT

We wish to thank the following for the use of photographs: A. Aubrey Bodine for photographs page 2, lower left; page 3, lower left and upper right—Baltimore and Ohio Railroad, page 2, top; page 2, lower right—Baltimore Sun, page 6—WBAL, Page 20, top left.

On the Cover: Talbot County Agent R. S. Brown gives 4-H member Wade Dudrow a hand with his Tractor Maintenance record book. Wade, 17, is a 4-H champion tractor operator of the East. He is also pictured on page 19.

Cooperative Extension Work in Agriculture and Home Economics, Extension Service, University of Maryland and United States Department of Agriculture Cooperating. James M. Gwin, Director. Distributed in Furtherance of Acts of Congress of May 8 and June 30, 1914.

Extension Work and People

The term "extension work" undoubtedly means something different to each of you. To some of you it brings memories of a small boy trying to handle a balky calf about twice his size, to others it means many happy hours spent with neighbors at a Homemakers Club learning about new and better ways for homemaking and family living, and to still others it brings to mind improved farm practices which have made work more profitable or easier.

Maybe some of you haven't been that close to "extension work." Perhaps you only know it as a voice on the radio, a place to write for free bulletins on everything from insect control to home redecorating, or as an unidentified "agent" who told a friend of yours about a new way of doing some home or farm task.

Most of you know about "extension work" because of your contact with one of the Extension agents in your county. It may have been the county agricultural agent, the home demonstration agent or an assistant agent; or possibly you have heard talks by one or more of the "specialists" from the various departments of the University of Maryland. These are the representatives of the Extension Service which carries the teaching in better agriculture and better home economics from the University of Maryland College of Agriculture and College of Home Economics, the State Agricultural Experiment Station and the U. S. Department of Agriculture to all the people. It "extends" the teaching beyond the classroom on to the farms and into the homes of Maryland people.

But that is only half of the story.

The other half of the story is the story of the people and what they did with the Extension work after they got it. That's the important part. How those people used this extension teaching is the real measure of its effectiveness. It is those people who have earned for Extension the title, so frequently used, "The greatest adult education program in the world."

In this, the Thirty-Eighth Annual Report of Extension Work in Maryland, we have tried to tell you of the other half, the story of "Extension Work and People."

James M. Gwin

Director

At Top: Cauliflower and other cool weather vegetables do well in Garrett county's high, cool air. R. L. Winklepleck, of the Baltimore and Ohio Railroad, at left, helped introduce the new crops and find a market for them. Earl K. Harvey, one of the first cooperators and on whose farm this demonstration was conducted is at right.

Above: Quality of Garrett county vegetables matches that of any grown in America.

New Crops

Vegetables Open New Horizons in Garrett County

Although the University of Maryland and local farmers had found out years ago that cauliflower, kale, broccoli and spinach would do well in the high cool climate of Garrett county, these crops were never grown in any quantities, principally because of lack of a market.

In 1950, John Carter, county agent, interested farmers in organizing the Garrett County Vegetable Growers association. The B & O railroad, through its horticultural agent R. L. Winklepleck, scouted out market outlets. The association now has 22 members and has advanced to the stage where it is considering employing a salesman to work full time during the marketing season.

Two demonstrations were established in 1950, a one-acre field of cauliflower on Earl K. Harvey's farm and a half acre each of cauliflower and broccoli on the Donald MacMurray farm. Both plots produced bountifully.

A portion of Harvey's plot, yielded 600 crates of cauliflower per acre, 12 heads to the crate. They were sold at $2 to $2.50 per crate.

During 1952, growers planted 40 acres of cauliflower, shipping 24 car loads. Approximately 49,000 crates were shipped by truck. The associa-

tion also shipped 18,000 bushels of kale and 8,000 bushels of spinach.

Indications are that the 1953 vegetable acreage will be 250 to 300 acres, other than potatoes.

Expenses growing the cool weather crops are high but a net income of $100 per acre, after all costs have been paid, has not been uncommon in the Garrett county venture.

The new growers had much to learn about handling vegetable crops. The county agent set up a number of demonstration plots and conducted tours to show how and what could be done.

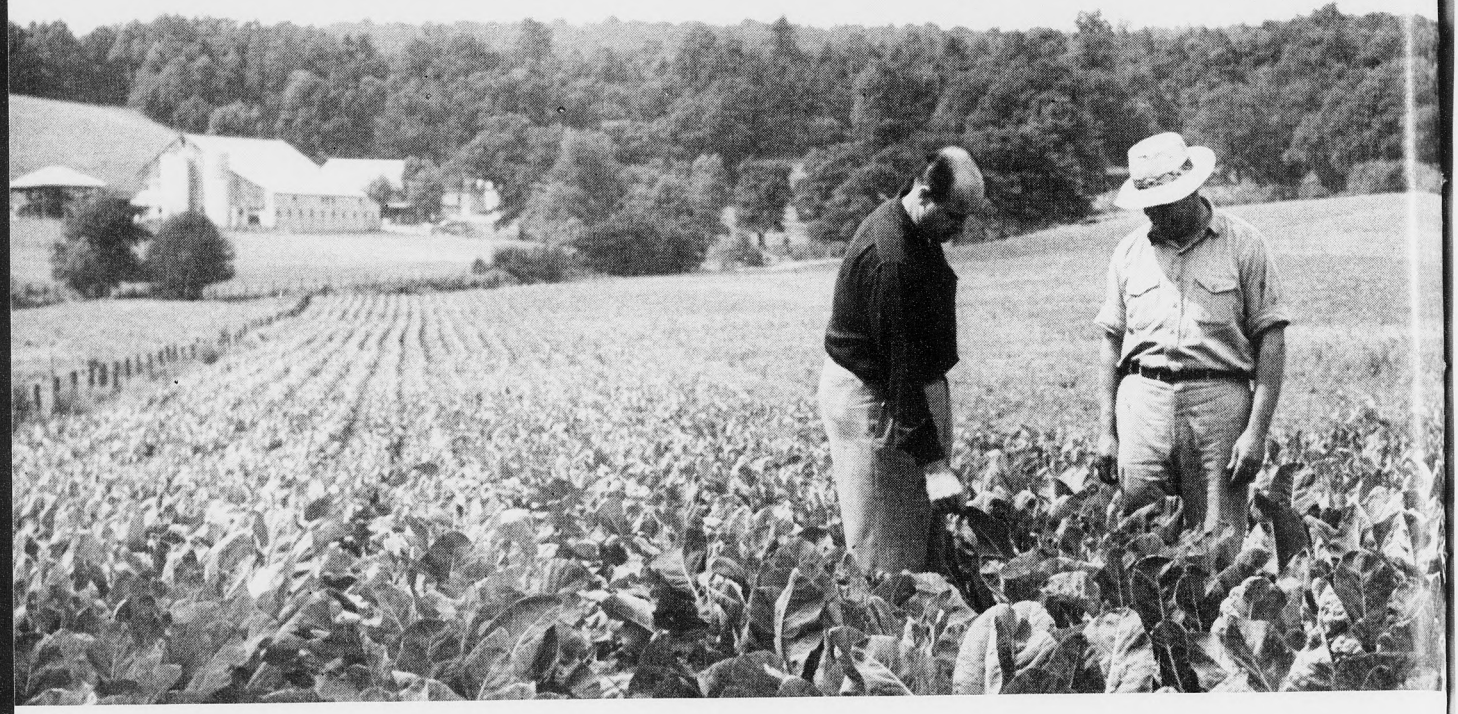
Information on planting dates, establishing schedules for transplanting and spraying, application of fertilizer and insect control was collected by the agent and made available.

Harvesting, grading and marketing methods also were activities which needed much assistance and cooperation.

This year, the horticulture department of the University of Maryland, cooperating with County Agent John Carter, set up thermograph equipment to record weather conditions which will be helpful in securing vital weather information to vegetable growers of the county.

As promising as the early results have been, vegetable authorities feel that thus far, the surface has only been scratched. They feel that growing of these new crops will see great expansion in the next few years, bringing many additional dollars of income to the county.

Above: John Carter, Garrett county agent, and vegetable marketing specialists from the University of Maryland demonstrated harvesting and packaging methods, all of which practices were entirely unfamiliar to the new growers. *Below Left:* High school girls made as much as $15.00 a day cutting kale. *Below, Right:* Farmers turned out in droves to vegetable field days to hear the story of cool weather crops.



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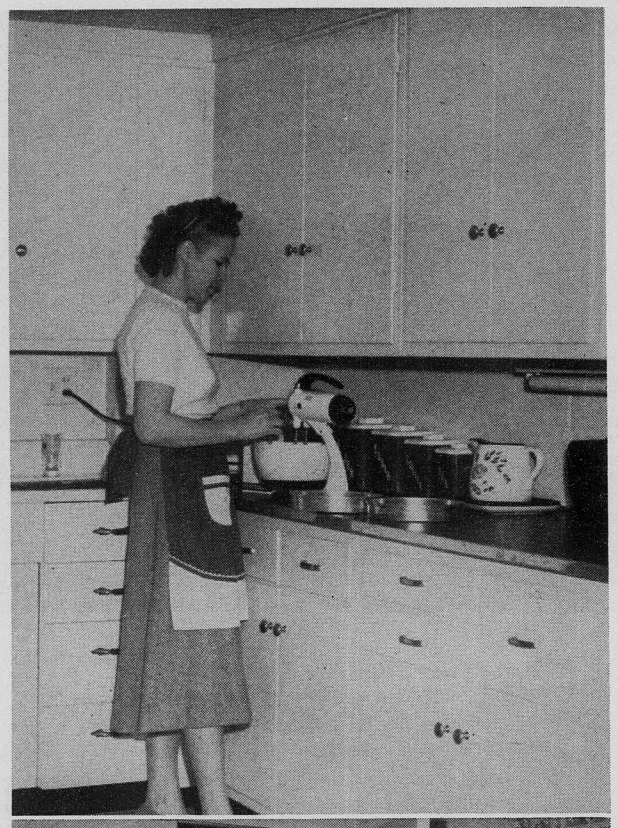

Ex-Nightmare

Good Counsel, Plus Hard Work Brings Dream from Nightmare

When the Nelson Covey's of Caroline county moved to their farm, the ell-shaped frame house had Mrs. Covey stymied.

No storage, a small box-like living room, low ceilings, falling plaster, dark rooms and poor floors. The oversized kitchen, walls broken with windows and doors, a projecting chimney and a corner stairway, seemed hopeless.

The dream kitchen, where she planned to put her present equipment, changed to a nightmare.

Bessie Spafford, home demonstration agent, was leading a "home remodeling counseling tour." The group came to the Covey's. Group thinking planned adequate storage throughout the house, recommended tightening the floors and laying plywood foundation for linoleum.

The group thought that with the stairway out of the kitchen and one window closed, a corner could be used to make Mrs. Covey's dream come true. Someone else suggested a dining unit at the other side of the kitchen.

A check for bearing partitions showed that the partition between living room and hall partition could be removed to make a larger living room. Miss Florence Mason, extension home furnishing specialist of the University of Maryland, prepared scaled drawings for storage space.

After the counselling, the Covey's went into a huddle about the cost. Nelson thought he could handle most of it—the rest a neighboring carpenter took on.

As work progressed, they found a stair rail and newel post needed replacing. For a few dollars, Nelson copied an Early American design for the post and used plain banisters. This looked so nice, he decided to lay a hardwood floor in the living room.

Above: **Taking out a stairway and closing a window in Mrs. Nelson Covey's old house cleared the tracks to build this beautiful, convenient kitchen.**

Below: **Two closets near the kitchen entrance are mighty handy in any house—especially one on a farm.**

With enthusiasm, Mrs. Covey wondered, "Why not redecorate according to recommendations discussed at homemaker club meetings?"

Mrs. Covey learned that good decorating plans cost no more than poor ones.

Plans for window treatments, and slip covers making use of some curtains already on hand, were included. Luckily for Mrs. Covey, a slip cover training meeting was held about the same time. She found the work easy and saw a way to make her old furniture look new. She fattened some cull chickens, that a helper at the broiler plant refused as a gift, to buy asphalt tile for an enclosed back porch that was to serve as a laundry and utility room.

When the work was finished, the house was included in a county tour. The most arresting improvement was the beauty of related colors and designs in wallpaper and furnishings, the simple and effective window treatments that diffused light so pleasantly, and the appealing "hominess" of the plan.

To date, more than a thousand visitors have seen the place. Men want to return with their wives, wives with their husbands. The place is now a home furnishing information center for the community. Miss Mason has prepared colored slides made in this home for use of homemakers clubs. These have been used throughout Maryland to show to other homemakers.

Grandson Mike Harding enjoys his milk in the pleasant kitchen dining space at Covey's.

4-H club members not only "learn by doing" but they also "learn by showing."

The 4-H team demonstration teaches the members self confidence and poise as well as thoroughly grounding them in the material they are showing.

These Wicomico county 4-H girls put on their demonstration, "My Room at Home," during 4-H Club week at the University of Maryland. They are left to right, Nancy Banks, Vera Kluge, Jane Shivers and Jean Coopers.

The 26th annual Rural Women's Short Course was held at the University of Maryland in June, 1952. This event attracts around 2,000 women to its classes and events each year. Here an expert on foam rubber demonstrates the use of this new product as upholstery.

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"Controlling spittlebugs increased my hay crop about one-third," Frank Lupo tells Frank McFarland, Baltimore associate county agent.

More Hay

Controlling Insects Boosts Alfalfa-Clover Yield and Quality

Frank Lupo, Baltimore county farmer, got about a 35 per cent bigger hay crop in 1952. The quality was a lot better, too.

Controlling spittlebugs by spraying made the difference.

Spittlebugs and leafhoppers are a serious pest with Maryland hay crops. The spittlebug damages the first cuttings while the leafhopper is a pest mainly with second and later cuttings of hay.

Only recently with the development of spraying, has it been practical to attempt to control them.

Mr. Lupo's farm was one of the many in Baltimore and Harford counties on which spraying for insect control in hay crops was done last spring for the first time.

In Mr. Lupo's case, the materials cost about $1.50 per acre—a cheap price for an extra three-quarters ton of hay. His spraying machine cost him less than $200.

Methoxychlor, benzene hexachloride or toxaphene, in a water solution, are the chemicals used for hay spraying. A tractor-mounted spray machine does the job in a hurry at a low cost.

Working in cooperation with Frank McFarland, Baltimore associate agent, Mr. Lupo sprayed most of his alfalfa and clover acreage. Mr. McFarland

suggested that he leave some check or unsprayed lots so the results could be compared.

Field days were held at the Lupo farm and at the Frank Sterbach farm in Harford county so farmers could see the results.

On the morning of the field day at the Lupo farm, sample strips were cut from each of the plots. The hay was weighed and placed in piles for a visual demonstration.

The difference in growth as a result of the spraying was easily apparent in the standing hay. The height and color were much superior.

Agronomists from the University of Maryland made careful checks of the weights.

The check of clover, showed 2 1/3 tons per acre where sprayed and 1 2/3 tons where it was not sprayed.

Mr. Sterbach sprayed a second cutting of alfalfa to control potato leafhopper.

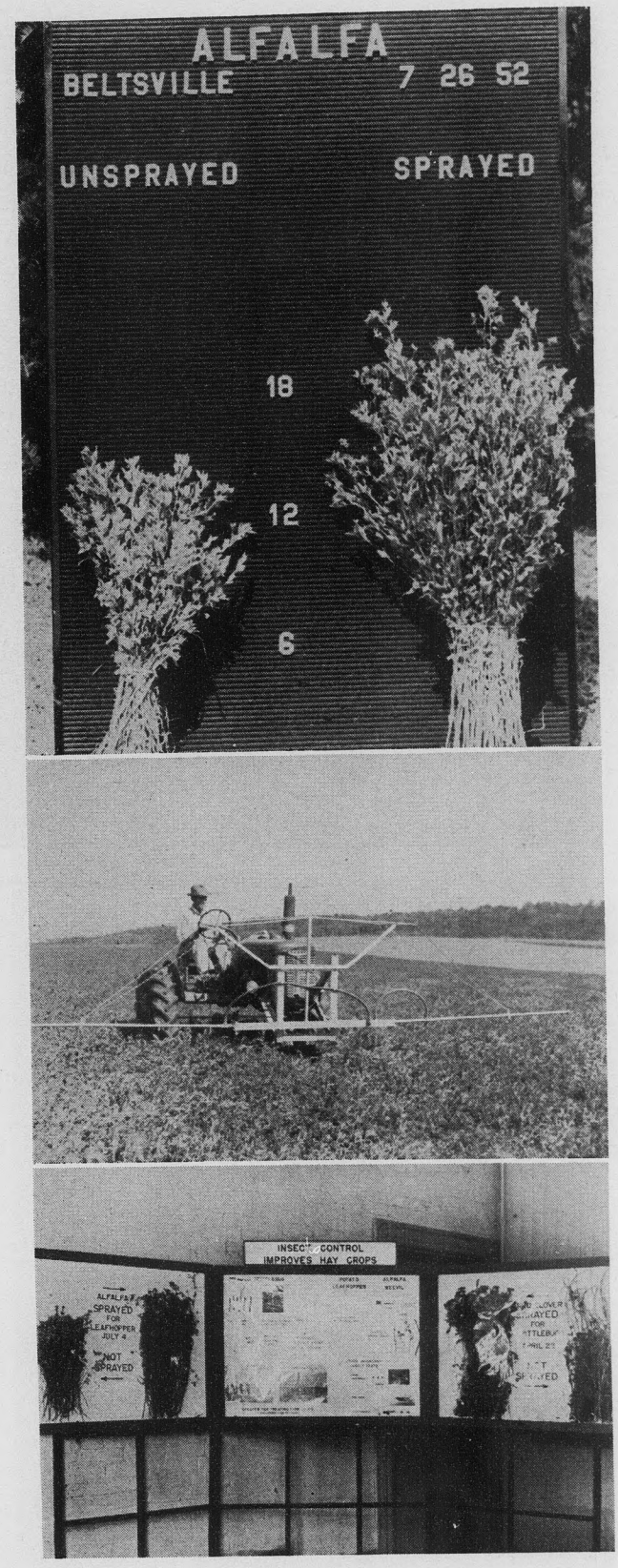
At the time, about July 4th, the alfalfa was beginning to show the yellowing of leaves which is typical of leafhopper injury.

During the dry weather, July 4 to July 30, the portion of the field which had not been sprayed almost stopped growth while the sprayed sections continued to grow and made an estimated two to three times the yield of the unsprayed areas.

In the spraying operation there were occasional small strips that were missed and small portions did not get the spray as the machine turned at the end of the field. The effects of the spray were so evident and definite that it was possible to follow each turn of the sprayer across the ends of the field.

Harford County Agent H. M. Carroll arranged a twilight meeting to which farmers were invited to see the spectacular results of this spraying.

This was not a planned demonstration but was an example of the way in which Extension can and does capitalize on worthwhile demonstrations as they develop.



Top: Controlling leafhoppers made the difference.

Center: Francis Hering, Westminster, does a good job with his homemade sprayer.

Bottom: This exhibit was shown at many county fairs and farmers meetings.

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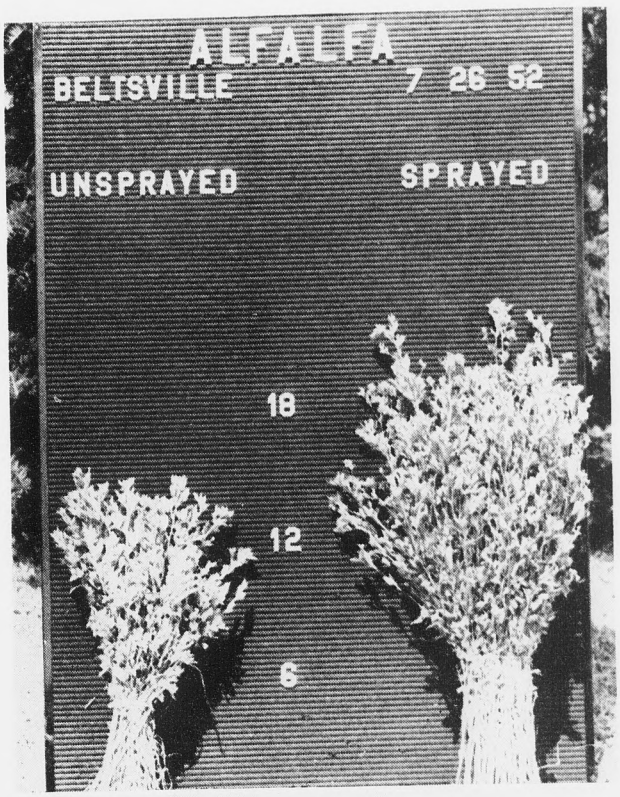

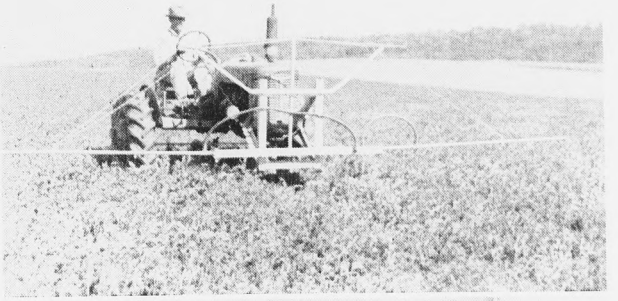

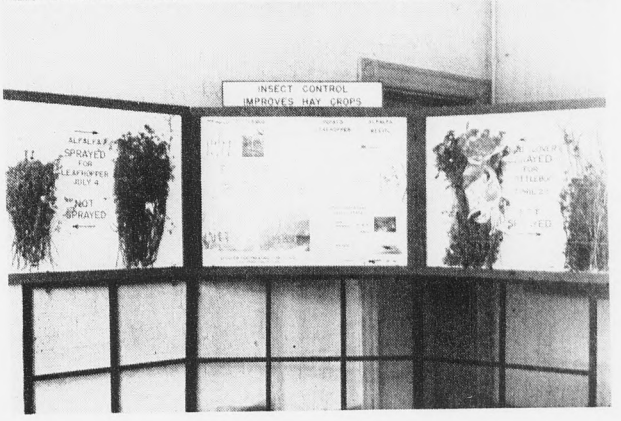

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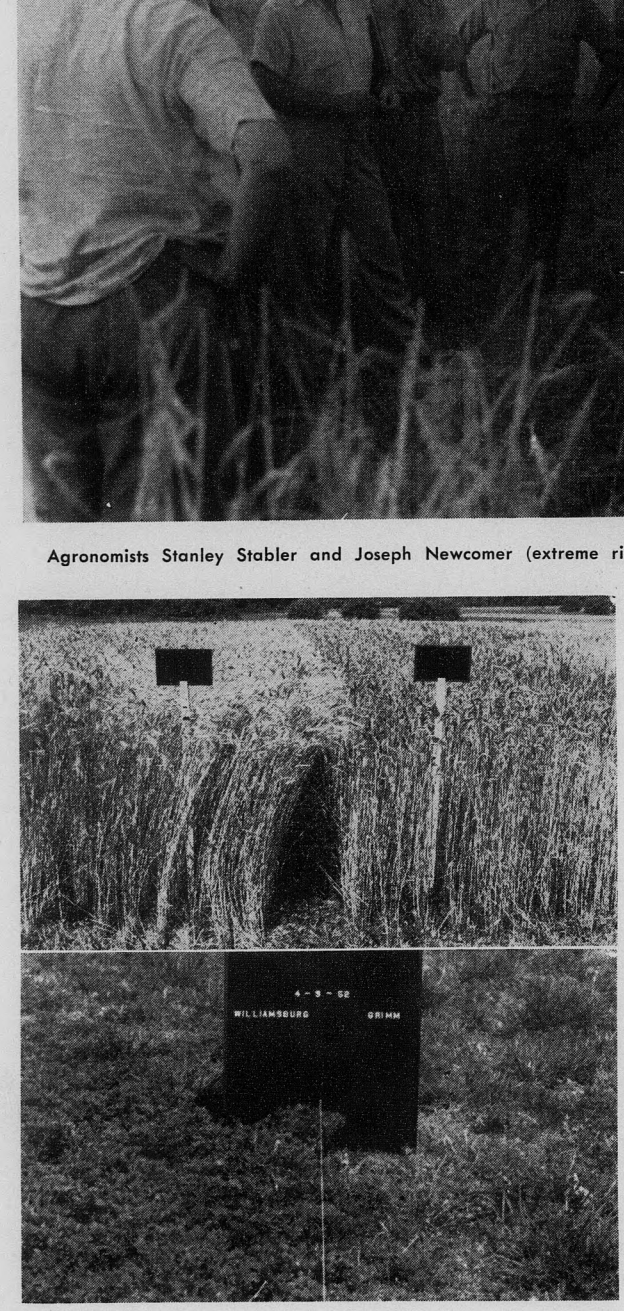
Agronomists Stanley Stabler and Joseph Newcomer (extreme right) show better wheat on Henry Kuebler farm in Dorchester County.



Demonstrations of comparative performance of varieties provide "Seeing is believing" teaching.

Better Crops

Extension Shows Way to Higher Yields and Improved Pastures

Henry Kuebler and Fred Eberpacher, two young farmers near Drawbridge, Dorchester county, were having trouble getting a satisfactory wheat crop.

Corn and hay yields on their farms were going up, consistently. Wheat yields had been declining. Straw growth was vigorous but lodging was excessive.

These farmers were following good fertility practices. They had been plowing under ladino, and fertilizing liberally.

They asked the aid of County Agent Harry Beggs who called in agronomists and soils specialists of the University of Maryland.

Their first conclusion was that there must be an unbalanced condition in available plant nutrients. The heavy straw growth indicated nitrogen was too high but they believed potassium might be too low.

Their first recommendation was more potassium fertilizer.

But this did not completely solve the problem. These farmers, as their fathers before them, for years had grown Deitz Longberry wheat, a very high yielding variety. As fertility increased, this variety lodged so severely that it could no longer be used.

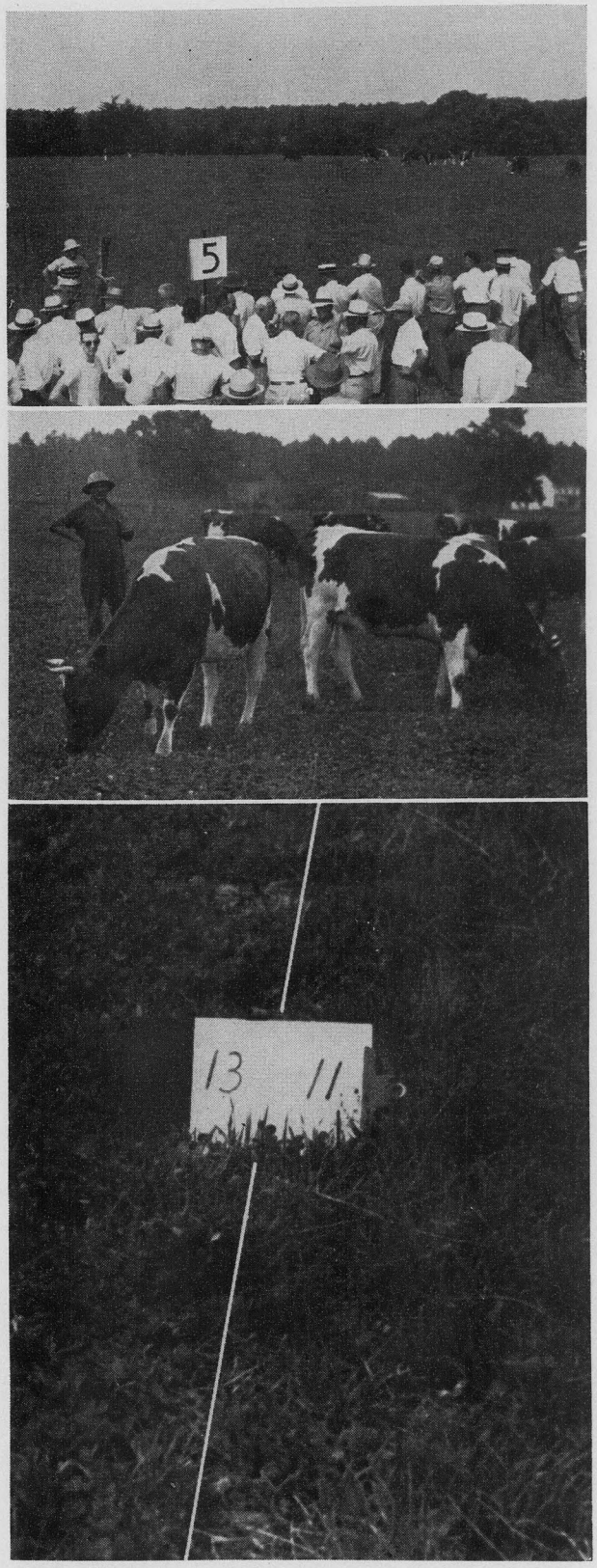
In the fall of 1951 a combination fertility and variety demonstration was put out on the Kuebler farm. When the wheat was ready to harvest, 40 neighbors came to a "Twilight field day."

A new variety carrying experimental number "USDA 2381," was outstanding for both yield and stiffness of straw. The new Atlas varieties were almost as good on both of these counts. Deitz Longberry lodged severely and the yield was much lower. The yield figures also showed that the 0-1-1 fertilizer gave slightly higher yields than any other combination on this soil.

Many farmers in the neighborhood are changing their variety and fertilizer practices in line with the results of this demonstration.

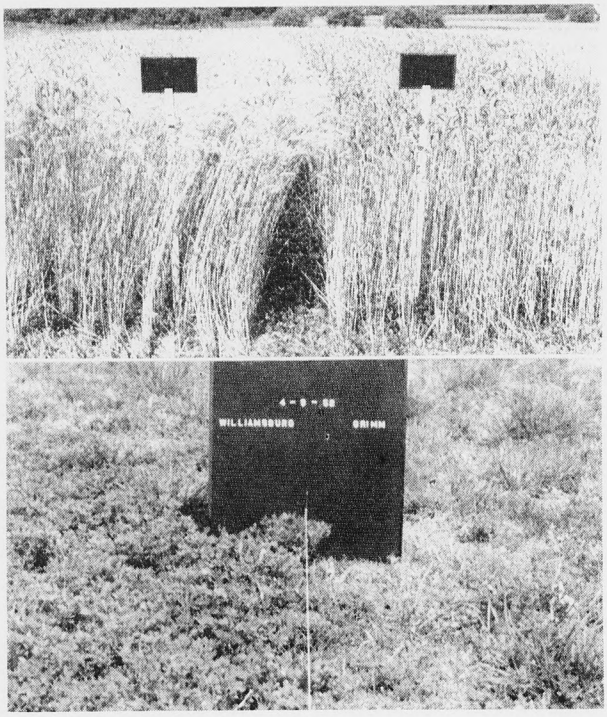
A similar demonstration was conducted in 1952 on the FFA farm at Gaithersburg high school in Montgomery county.

Besides numerous field demonstrations which were held on variety tests, weed control and other subjects, most counties held meetings to discuss production of field crops and their best utilization by livestock.



Top: Southern Maryland farmers see grazing demonstration at Tobacco Experimental farm. This pasture produced 400 pounds of beef per acre each of the last two seasons. *Center:* Clarence Hartman and his Guernseys on an excellent orchard grass-ladino clover pasture on lower Eastern Shore. *Bottom:* Demonstration on Chester Ernst farm, Washington county, shows how clipping and removing straw improves red clover stand. At left, the straw was removed after combining; it's a good stand. Right, not clipped, straw left, poor stand.

Agronomists Stanley Stabler and Joseph Newcomer (extreme right) show better wheat on Henry Kuebler farm in Dorchester County.



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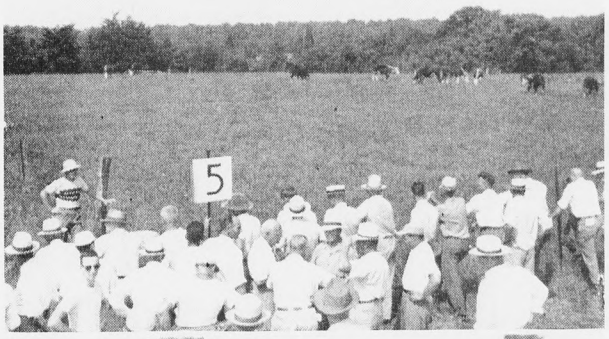
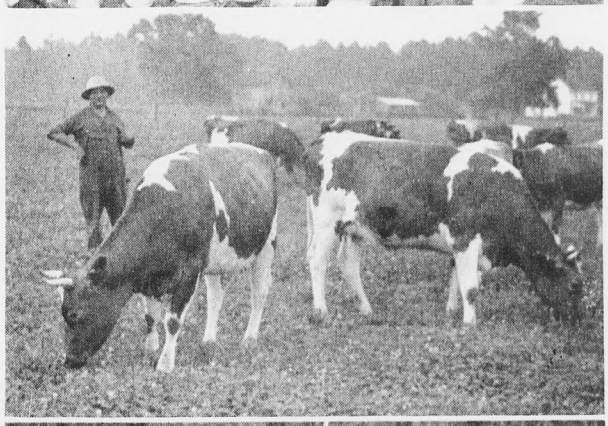
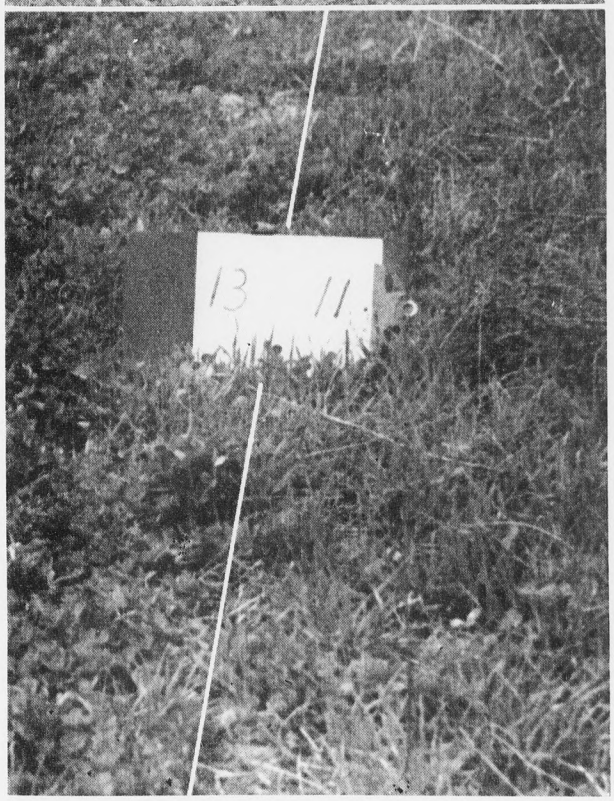
A similar demonstration was conducted in 1952 on the FFA farm at Gaithersburg high school in Montgomery county.

Besides numerous field demonstrations which were held on variety tests, weed control and other subjects, most counties held meetings to discuss production of field crops and their best utilization by livestock.







Top: Southern Maryland farmers see grazing demonstration at Tobacco Experimental farm. This pasture produced 400 pounds of beef per acre each of the last two seasons. *Center:* Clarence Hartman and his Guernseys on an excellent orchard grass-ladino clover pasture on lower Eastern Shore. *Bottom:* Demonstration on Chester Ernst farm, Washington county, shows how clipping and removing straw improves red clover stand. At left, the straw was removed after combining; it's a good stand. Right, not clipped, straw left, poor stand.

Teamwork

Family Almost Doubles Production Per Cow in 11 Years

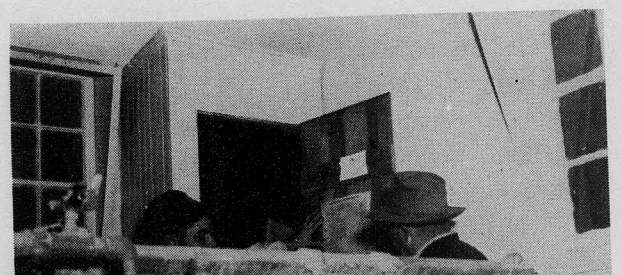
Improving dairy production, one of Maryland's major sources of agricultural income, is a long term proposition. Dairy Extension work has been going on since the beginning in 1914. Dairy Herd Improvement associations (of which there are 43 with 841 member herds), 1,401 dairy 4-H members, tours, meetings, bulletins and a dozen other methods, have been used to carry the gospel of better dairying to farmers of the state.

The Dairy Herd Improvement associations have been the backbone of this program. Such an organization is a group of farmers organized to employ a trained tester who visits their farm once a month to test and record the production of each cow.

Analyzing this information enables the farmer to plan his feeding program better, detect and cull out low producers, find out which bull transmits the best production to his daughters and to generally enable the herd owner to keep close touch with what is going on.

The experience of the Edwin D. Fry family of Laytonsville, illustrates this. The Fry's have a 285 acre farm. The family has been active in Extension —all five children in 4-H, Mrs. Fry in homemaker clubs. As the sons have grown they have become

From his DHIA records, Edwin Fry and his son Edwin C., center, know just what each cow is putting in the bank balance. Extension Dairyman J. R. Schabinger is at left.



No guess work about this. Edwin Fry, Jr. and his father, have day-by-day records near each cow so there will be no slip-ups in writing them down.

partners with their father to make a truly cooperative dairy operation. Mr. Fry has been a member of the Montgomery County Herd Improvement association since 1942. Here's his record:

Year	Cows in Herd	Average Milk	Average Fat
1942	70	7,279	301
1943	60	8,176	349
1944	60	8,414	355
1945	56	9,947	416
1946	66	11,011	456
1947	55	10,873	450
1948	58	11,148	457
1949	65	11,589	474
1950	56	12,380	486
1951	60	12,680	502
1952	62	12,610	472

You will note that while production per cow went from 7,200 pounds of milk (301 pounds of fat) in 1942 to more than 12,000 in 1952 (472 pounds of fat), the herd stayed about the same size. This means that Fry's are getting nearly twice as much milk and higher fat content milk, from the same size herd.

He has culled his cows on the basis of their production. Also since he started testing, he has put other management and feeding practices into operation that he learned about through the DHIA.

Mr. Fry has given very close attention to the herd bulls he selects. He has been a member of the Maryland Artificial Breeding Cooperative since its organization in 1946. Two of his bulls have been used by the cooperative in its bull stud. One of

these bulls made the following record of improvement in the Fry herd:

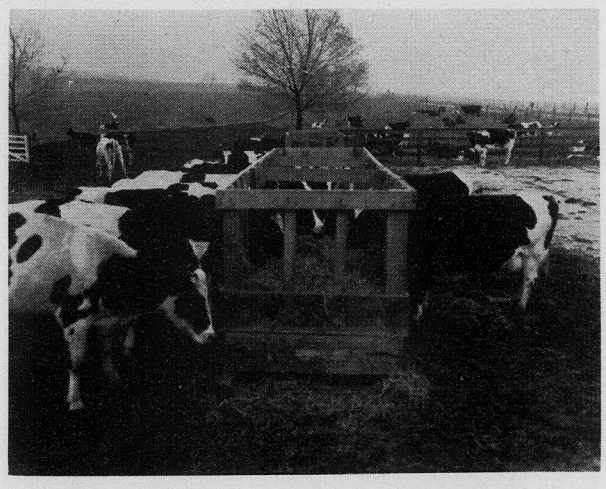
7 Dams	8,361 lbs. milk	355 lbs. fat
7 Daughters	9,398 lbs. milk	393 lbs. fat
Gain	1,037 lbs. milk	37 lbs. fat

Among the improvements on the Fry farm are two hay racks in the concrete lot. These racks are never empty, winter or summer. He has noticed that the heaviest producers eat the most hay and will often take a mouthful even in the lushest pasture season. He also feeds silage the year around. In addition to roughage he uses a 13 per cent protein grain at the rate of one pound for each four pounds of milk.

Mr. Fry gives the same care to his pastures that he gives to his herd. The milking herd of 55 to 65 runs all summer on 45 acres, mostly orchard grass and ladino divided into four lots to spread the grazing. He fertilizes every year; limes every three years. Last year he clipped the pastures three times, using the clippings for bedding.

As a result of this program of pasture care, he gets an extra month of grazing.

To meet the labor shortage, Mr. Fry installed a barn cleaner and a milk holding tank. He also uses such smaller items as feed carts and foot treadles on the doors to make the operation more efficient. He finds the cold wall holding tank a paying proposition. He has noticed a $3 a month electric saving. The milk quality and weight have been fully satisfactory.



Hay the year around is part of the secret of the high-producing Fry herd. Even when there is plenty of grass, the cows grab a lunch here.

Top: The 1,400 boys and girls enrolled in 4-H dairy clubs in Maryland promise that dairying will show even greater improvement in the future. This is Norman Hill, Woodbine, high Holstein judge at the National Dairy Cattle Congress at Waterloo, Ia. *Bottom:* Bulls in the Cooperative Breeding stud have 335 "test tube" daughters that have completed production records in DHIA associations. Their milk average is 5,149 pounds of milk and 253 pounds of butterfat greater than the average production of all the dairy cows in the state.

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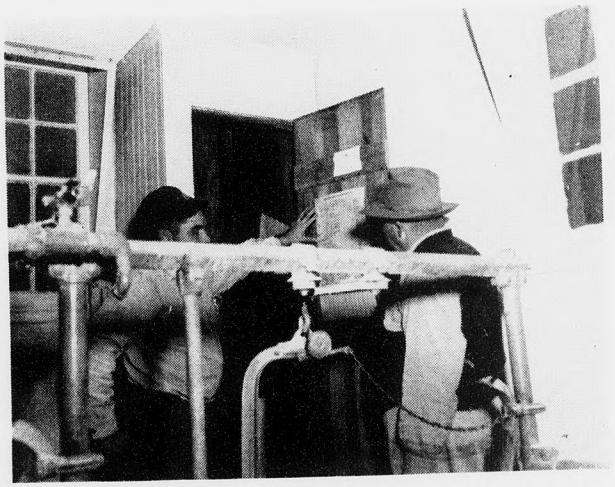

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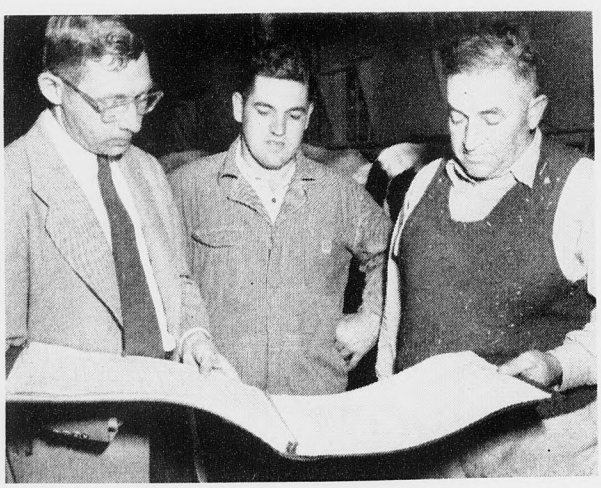

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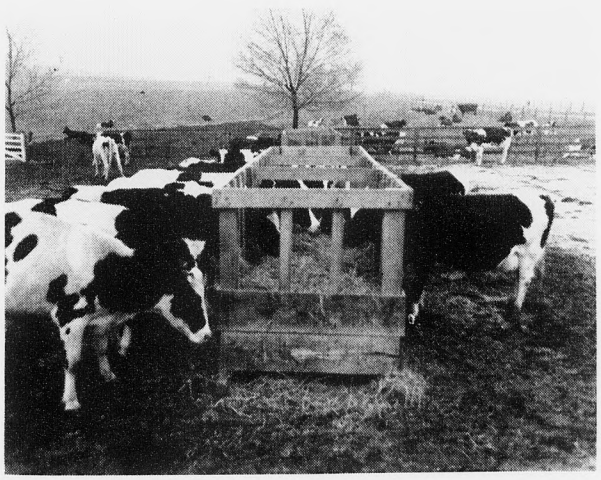

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Extra Income

4-H Boy Finds Turkeys Are a Good Extra Income Project

When Lester King, Jr., 16, of Owings, Calvert County, was 13, he became interested in raising turkeys. Being the son of a large tobacco farmer where only a home flock of 50 laying hens was kept, would usually be enough to doom such dreams of most boys in Southern Maryland.

However, Lester's father had been a 4-H member and knew what 4-H could mean to a boy. Lester had support and encouragement from the start.

The assistant county agent encouraged him to join a poultry club. The Sears-Roebuck Foundation financed the cost of poults the first two years, the cost to be repaid when the turkeys were sold. In 1952, Lester financed his own project.

He lost some birds the first year from coccidiosis because the birds were on infected ground. Assistant County Agent W. B. Vanderford pointed out that a wire porch would solve that difficulty.

The second year he learned more. He enlarged the porch for more room and covered part of it to give protection from the sun and storms. Also the wire floor was replaced with wooden slats to better support the weight of the toms, reducing foot and breast blisters.

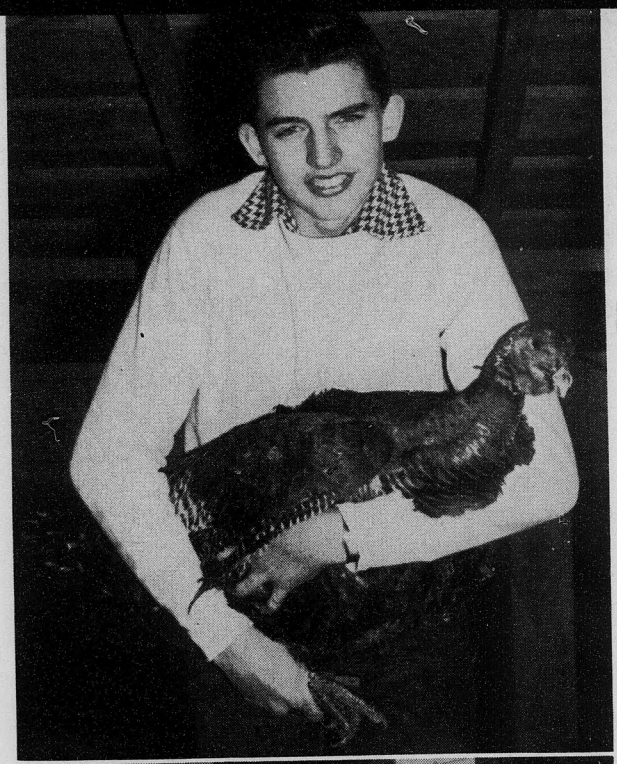
Lester was learning as he went along.

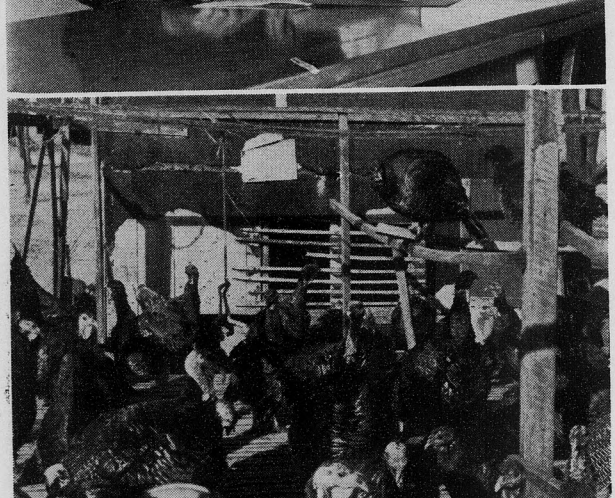
The first year, Lester started 104 poults, lost 13, marketed 89. His costs were $595, his sales were $965, the labor income $370 or $4.15 per bird.

The two following years, his record was about the same although he was able to reduce losses as he learned more about it.

"There is room for more 4-H projects of this kind in Southern Maryland," says W. H. Rice, extension poultryman at the University of Maryland.

"Proper encouragement and help of the parents, plus interest of the boy or girl, plus the guidance of 4-H club work is the formula for their success," Mr. Rice added.





Top: Lester King has made $1,322 net income from his turkeys in the past three years. *Center:* Assistant County Agent W. B. Vanderford encouraged Lester in his poultry project and assisted him with his records. *Bottom:* Simple, inexpensive equipment houses the flock.

Nancy Long learned to run a sewing machine before she could reach the treadle. Mrs. Long and her daughters make practically all of their own clothing.

Nancy makes all of her own clothing except winter coats. Since she's five foot, eight and a half inches tall, she finds it difficult to find ready-made clothes. Her 4-H training stands her in good stead to keep her well-dressed at low cost.

Sewing is a family proposition in the Long family, with eight-year-old Dottie, little Donnie, and even Mr. Long having a hand with his wife and children. Mr. Long's advice on fit, styling and color are eagerly sought by his wife and daughters.

Unquestionably much of the success of the Long girls in their projects is due to the helpful understanding they have received from their parents.

In the adult phases of the Extension clothing project, 1,018 leaders were directly assisted and the program influenced more than 200,000 families in various clothing problems.

New Clothes

Maryland Women and Girls Dress Better at Lower Cost

Maryland 4-H girls had a busy year with their clothing projects. The records show that 2,671 girls completed their projects, making 5,582 garments and remodeling 532.

One of the busiest of the girls was Nancy Long of Cumberland, the 16-year old State dress revue winner and delegate to the National Club Congress in Chicago.

Nancy has been in 4-H work since she was 9, being a member of the LaVale 4-H club which is led by her mother, Mrs. Donald Long. In excelling in 4-H club project, Nancy follows in the footsteps of her older sister, Barbara, who was a Chicago delegate in 1948 on her clothing record.

Nancy Long with her tailored suit which earned the title of State Dress Revue winner. The suit cost $4.65—the material was a gift; the main cost was tailoring the buttonholes.

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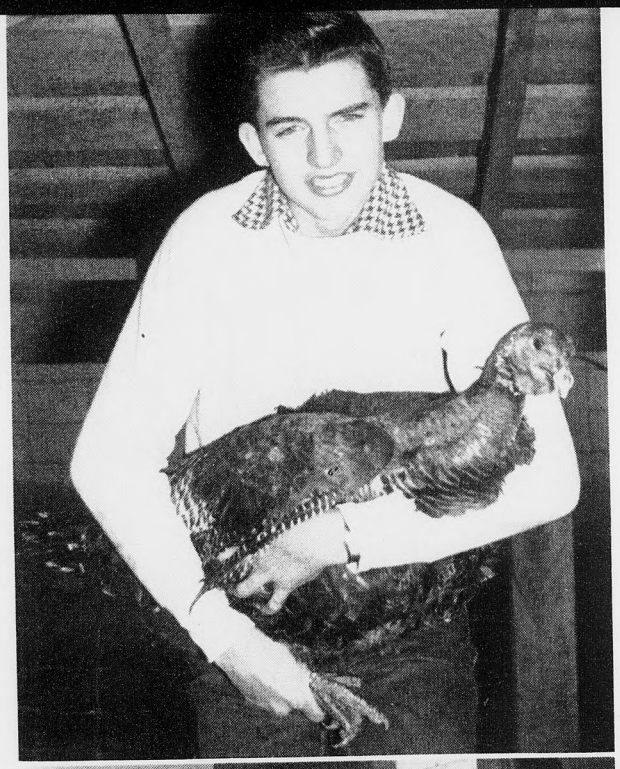

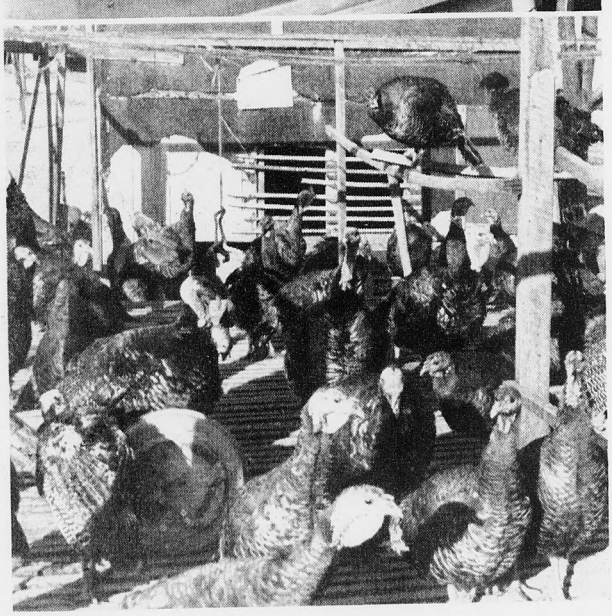

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Machinery dealers cooperate with Extension to show equipment and methods for tomato spraying near Hyde in Baltimore county.

Plant Diseases

Spraying Increases Tomato Yield 6.4 Tons Per Acre

Every agricultural crop produced in Maryland suffers from one or more serious plant diseases. These diseases, if left uncontrolled, cut deeply into quality and yield.

Demonstrating methods of controlling these diseases are the objective of Extension work in plant pathology. Field method and result demonstrations have been the principal methods used to bring this information to farmers.

One of the most striking demonstrations of the value of disease control was on the J. Nobel Jarrell farm near Goldsboro.

Using the Zineb sprays, Mr. Jarrell secured an average increase of 6.4 tons of tomatoes in both 1950 and 1951.

Late blight, early blight, leaf spot and gray leaf spot on unsprayed plots reduced the yield per acre to 5.67 tons in 1950 and to 5.4 in 1951. Sprayed plots yielded 12.1 and 11.8 tons, respectively.

Many tomato growers stopped in to look at results. The results were also given wide publicity in the press and in circular letters.

During the past year, 1952, abnormal weather unfavorable for the tomato crop, prevented such striking results from disease control in Maryland. But in years in which good tomato growing weather prevails, similar results may be expected from disease control, according to Extension workers in plant pathology.

Family Problem

Family Living Together Sometimes Is a Problem

Not all problems confronting families are concerned with better farming or homemaking. Some come from every-day problems of living together within the family.

A Maryland mother and homemaker contacted the Extension Family Life specialist about a problem which was causing unrest within the family.

An elderly aunt of the husband made her home with the family which included three children. This aunt was one who felt the family should do the things she wanted, have the friends she chose and cater to her wants.

She arose in the mornings at her own convenience, expecting her breakfast at odd hours and sometimes demanded that it be served to her in her room. The children stopped bringing in their friends because of the remarks the aunt made to them.

The aunt had a sister but the aunt did not wish to live with the sister because she would not receive the attention there she wanted.

The husband refused to discuss the problem with either his wife or his aunt. He felt his aunt was old and should be waited upon and he did not wish to hurt her feelings.

The specialist suggested that the whole family discuss the problem together, trying to help the aunt realize that each member of different ages has different interests and that each should be shown consideration. Each should have his wants considered as well as the next one, she told them.

The specialist suggested the family doctor be contacted to see if he could not help the husband understand what the situation meant to his wife's health. She suggested that the aunt go to her sister's home for a few months to give the wife and mother a time to live more normally with her family.

As a result of this counseling, the wife contacted her physician. His advice was to take the aunt to her sister's home for a few months. This was done.

When the aunt returned to her nephew's home, she continued to wait upon herself.

Now, she apparently shows a more cooperative attitude toward others in the home. They are again a happy family who have learned to live together.

Cooperation

4-H Girls Teach Mothers How to Improve Family Diet

Among the major activities of the Extension food and nutrition program were to develop an understanding of what the family needs for good health, to help the homemaker plan and prepare nourishing, timesaving meals with a minimum of cost and help her use the best method of preserving foods for later use.

Not every county concentrated on the same object or objectives. The various county Homemaker Councils decided on different subjects and varied methods of teaching, selecting those they considered best adapted to their community.

The home demonstration agent or the nutrition specialist trained food and nutrition leaders from each Homemaker's club to take the information in the form of a demonstration or discussion back to their club.

To encourage greater use of fresh fruits, a "must" for good health, Miss Evelyn Scott, home demonstration agent of Carroll county, planned a meeting on summer fruit desserts. The planning was done in cooperation with the county program planning committee.

Since girls in one of the 4-H clubs in the county were demonstrating fruit desserts to their members, it was decided they would have the girls give their demonstration for the training of Homemaker club leaders.

The leader of this club, the Hampstead girls 4-H club, was Miss Janice Raver. Miss Raver has done an outstanding job of training her girls in good demonstration "tricks."

Virginia Frush, Joan Allendar, Freda Davidson and Joan Stansbury, 4-H girls of the club, each gave a demonstration on how to make a fruit dessert at a training meeting for adult homemakers. Twenty-six food and nutrition leaders from 16 Homemaker clubs attended. The assistant home demonstration agent helped the girls plan and organize their demonstration.

The use of 4-H girls for this purpose shows cooperation between 4-H clubs and Homemaker clubs.

Mrs. Francis Hering, who is Carroll county food and nutrition chairman, said, "The girls used excellent techniques and their poise was an eye-opener to us homemakers who will be taking the demonstration back to our local clubs."

Following the 25 demonstrations in the county, a survey showed that 191 homemakers out of 319 served more fresh fruit for dessert and 144 of the 319 served new desserts to their families.

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Cooperation

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Among the major activities of the Extension food and nutrition program were to develop an understanding of what the family needs for good health, to help the homemaker plan and prepare nourishing, timesaving meals with a minimum of cost and help her use the best method of preserving foods for later use.

Not every county concentrated on the same object or objectives. The various county Homemaker Councils decided on different subjects and varied methods of teaching, selecting those they considered best adapted to their community.

The home demonstration agent or the nutrition specialist trained food and nutrition leaders from each Homemaker's club to take the information in the form of a demonstration or discussion back to their club.

To encourage greater use of fresh fruits, a "must" for good health, Miss Evelyn Scott, home demonstration agent of Carroll county, planned a meeting on summer fruit desserts. The planning was done in cooperation with the county program planning committee.

Since girls in one of the 4-H clubs in the county were demonstrating fruit desserts to their members, it was decided they would have the girls give their demonstration for the training of Homemaker club leaders.

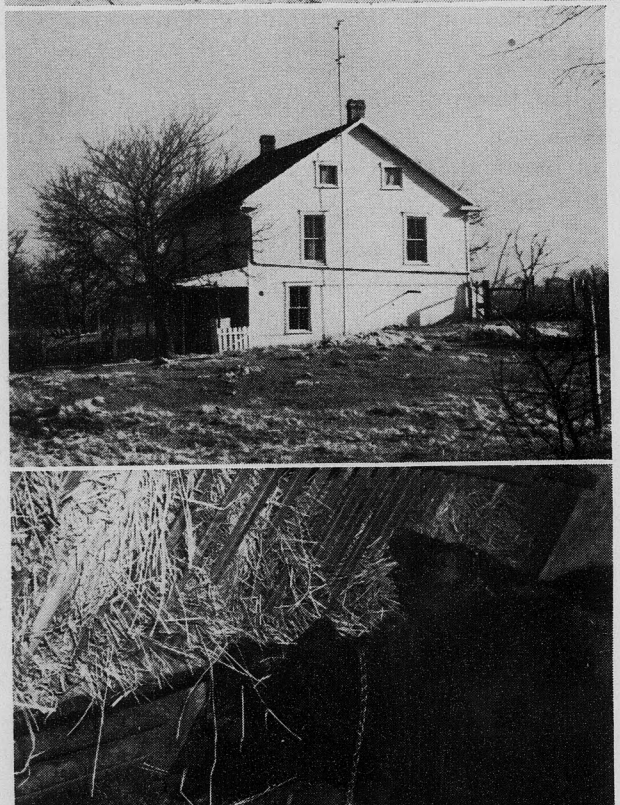
The leader of this club, the Hampstead girls 4-H club, was Miss Janice Raver. Miss Raver has done an outstanding job of training her girls in good demonstration "tricks."

Virginia Frush, Joan Allendar, Freda Davidson and Joan Stansbury, 4-H girls of the club, each gave a demonstration on how to make a fruit dessert at a training meeting for adult homemakers. Twenty-six food and nutrition leaders from 16 Homemaker clubs attended. The assistant home demonstration agent helped the girls plan and organize their demonstration.

The use of 4-H girls for this purpose shows cooperation between 4-H clubs and Homemaker clubs.

Mrs. Francis Hering, who is Carroll county food and nutrition chairman, said, "The girls used excellent techniques and their poise was an eye-opener to us homemakers who will be taking the demonstration back to our local clubs."

Following the 25 demonstrations in the county, a survey showed that 191 homemakers out of 319 served more fresh fruit for dessert and 144 of the 319 served new desserts to their families.



Milk Plus Beef

Angus Cattle Turn Waste Acres into Extra Income

There are about two million acres of land in Maryland which is in farms but because it is too wooded, too rough, too rocky or for other reasons is yielding but little income.

Fred Downey, Williamsport farmer, has proved that beef cattle will turn some of that land into dollars. Mr. Downey is primarily a dairy farmer, maintaining a 50-milking cow herd of purebred Guernseys.

Besides his home place, he owns two farms, totaling about 450 acres, of which only 110 acres are tillable.

In 1940-41, he purchased 34 grade Aberdeen Angus heifers. Since that time he has purchased registered bulls, always buying the best he could get. In 1949, he purchased eight registered heifers.

Above: These little black fellows who arrive in January and February, will be 400 pounders by October.

Left, Center: This old but comfortable house, helps insure keeping the hired help.

Left, Bottom: Corn and grass silage and orchard grass hay keep the breeding herd in good winter condition.

In that time, he has sold nearly 300 animals of all types. At present, the herd consists of 68 head, including 13 registered cows and heifers, 37 commercial cows and two registered bulls.

In the beginning, University of Maryland animal husbandry specialists and his county agent, cautioned him that breeding, pasture, winter feed and a good labor supply, will spell success or failure in such an enterprise. These factors Mr. Downey has watched very closely.

Feed costs have been kept at a minimum. All has been accomplished with grass, hay and silage—only nine head have been fed for sale in the 12 years.

Lime and a little phosphate have been added to the pastures. Hay, and grass or corn silage, have been the winter feed supply. All grain grown has been used by the dairy herd or sold for cash.

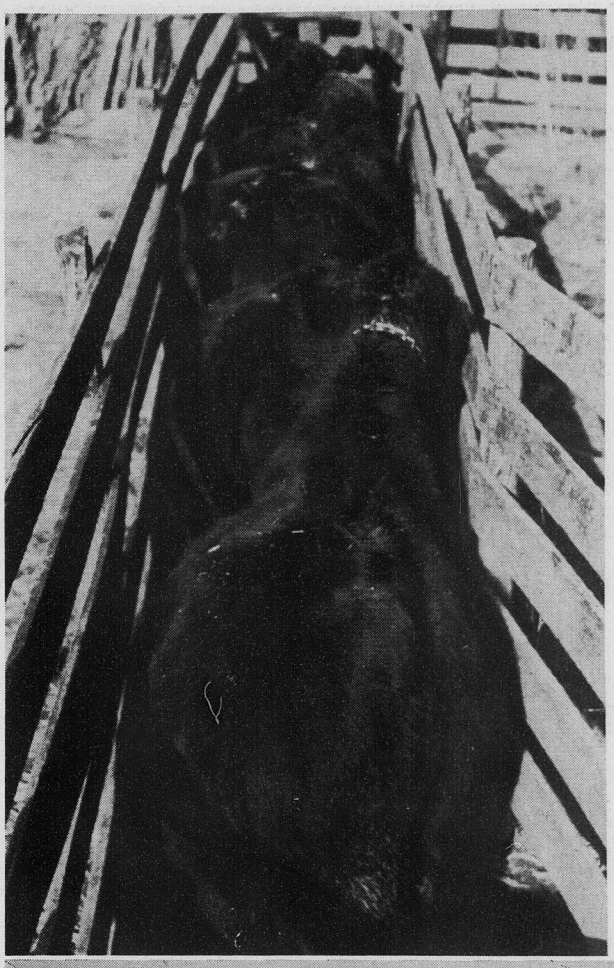
Pasture breeding has been followed. The bulls are left with the cows on pasture from April to August. The calves arrive in January or February, when as Mr. Downey says, "We have more time to fool with them."

Arriving early, the calves are big and strong enough to fend for themselves when they go on the grass with their mothers. They are sold off the grass in the fall.

This system of combining a beef herd with dairy divides the "eggs into two baskets" allowing a more diversified farming enterprise.

The year was generally favorable to livestock producers. But the swine industry encountered two obstacles—an unfavorable corn-hog ratio a good part of the year and the outbreak of vesicular exanthema.

Price drops hurt the beef producer. The Maryland Sheep Producers association organized in 1950 has been the nucleous of the Extension sheep program.



Above: A holding chute makes easy the jobs of loading and spraying.

Below: Adding only the silo was all that was needed to make this Pre-Civil War farmstead a good ranch headquarters.

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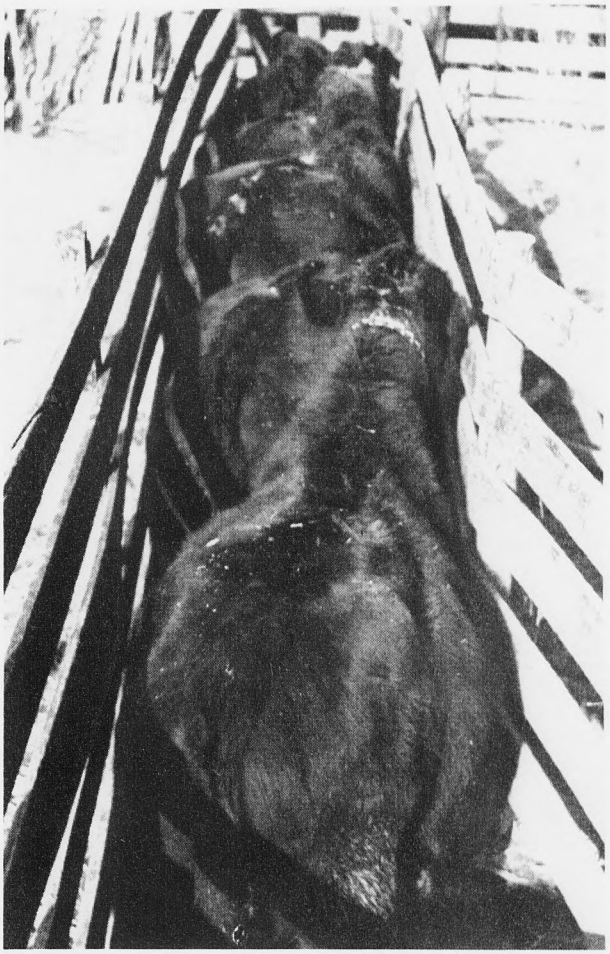

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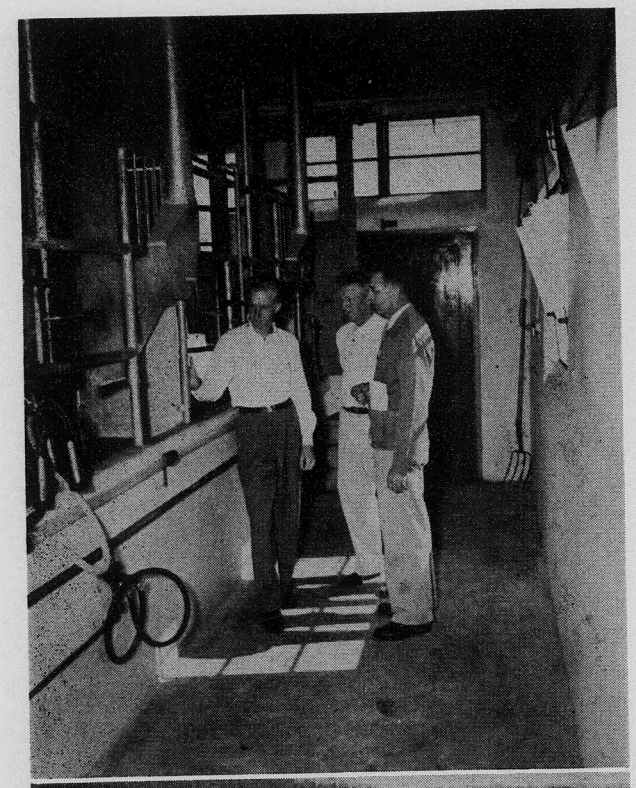


Efficiency

Efficiency Only Answer to Profitable Farming Now

The spread between cost of production and the selling price of farm products has narrowed. High wages, lack of experienced workers, short supplies of harvest labor and other difficulties have forced farmers to turn to electricity and other modern labor saving and cost-reducing methods to break even.

New ideas developed and put into use by farmers, with the help of agricultural engineering specialists, point the way to worthwhile improvements in getting farm work done.

For example, Lee Magness of Harford county has developed an automatic control for milking parlor doors. He pushes one button at the stanchion and a cow can be let out; push another button and the entrance door opens and another cow comes in. A second push on the buttons closes the doors.

Help with the new types of milking parlor equipment, conveyer feeders and automatic feed grinding are typical of the requests to the agricultural engineers.

Well planned feed grinding and mixing installations, including grain storage like those of Horace Brauning and Dick Richardson, Westminster, are examples of easy storing, processing and feeding.

Farmers are receiving help from service men of electric companies. The University of Maryland holds a training school each spring for these men. This multiplies Extension efforts.

Hay drying is becoming more common. M. C. White, Hyde; Earl Remsberg, Buckeystown; and Marion Carter, Phoenix; say their winter milk production remains high because they have better cured hay.

Top: Labor saving is a must on Maryland dairy farms. This milking parlor and overhead feed bins on the H. Smith Magness farm, Harford County, enables one man to milk 30 cows in one hour. *Center:* A. E. Meyers, Howard county, replaced his burned barn with this inexpensive pole barn and concrete block milking parlor. It is satisfactory and less expensive. *Bottom:* There is a demand for trench silo information. Extension collected and distributed data and suggestions on this inexpensive feed storage device.

Poorly adjusted tractor plows and hitches result in a poor job and high cost. It is estimated that 90 per cent of all tractor plows can be improved by adjustment. Eleven plow adjustment demonstrations were held last year.

A trench silo, in many cases is the answer to reducing feed costs. Farmers want information about location, drainage problems and methods of digging. Howard county farmers this year built 35 trench silos. Self feeders with trench silos are a new labor saver. Eugene Roberts, Prince Georges county, feeds 300 head from three trench silos, holding 1,000 tons, without touching a forkful of silage.

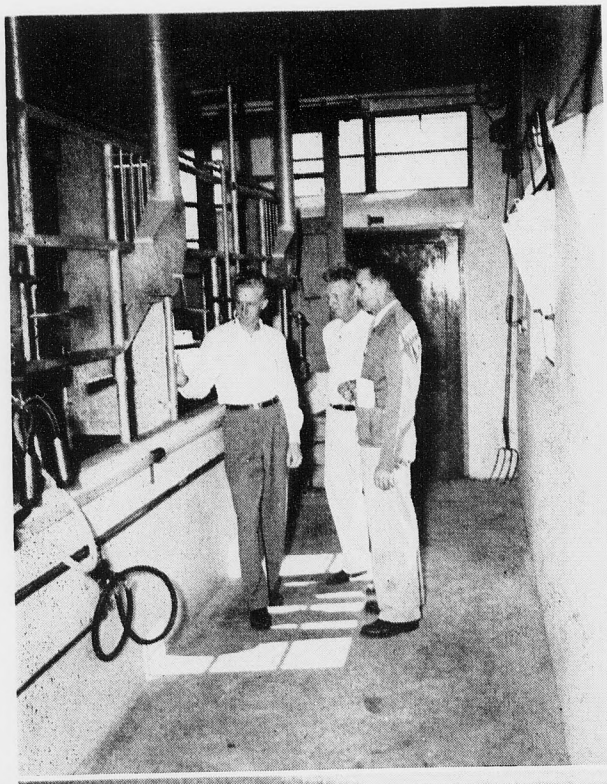
The Extension Service, supplies at nominal cost, blue print working drawings for approved designs of farm structures and equipment for farm homes. A large variety is kept in stock. During the year, 950 sets of plans were sent to 454 individuals in response to requests.

Extension agents report that in 1952, 1,700 families were helped with building plans; 325 with new dwellings, 405 with remodeling, 553 in constructing farm buildings, 407 with repair and 151 with selection and construction of farm building equipment.

Drainage is a big problem on the Lower Eastern Shore. Hundreds of new acres are now productive because of 112,500 feet of open ditches, 8,400 feet of tile and 17 farm ponds built last year. There are now 171 public drainage associations, generally referred to as "tax ditches" in that area. They serve 4,000 farmers.

As a result of Extension assistance, several contractors have sufficient experience to do many jobs on private farms without additional aid or engineering help.

Top Right: 4-H boys learn to get the most from and to take better care of their tractors. On the seat, flanked by his parents, Mr. and Mrs. Glen C. Dudrow, Talbot county, is 17-year-old Wade, 4-H champion tractor operator of the East. Wade is also pictured on the cover. *Above:* A. V. Krewatch, agricultural engineer, at one of his popular sewing machine clinics. *Above:* Many large home-built freezers have been built on Maryland farms. In addition to the family needs, they pay their way for a dressed poultry or similar retail operation. This is M. L. Boone, Frederick. *Bottom:* Bed irrigation makes better tobacco plants. Here's the system of Vernon Richardson, Brandywine.



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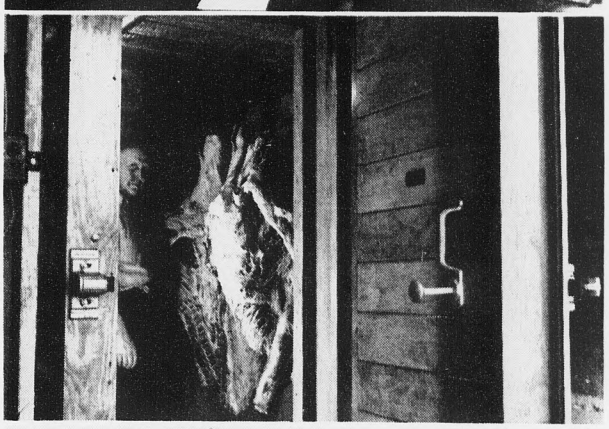

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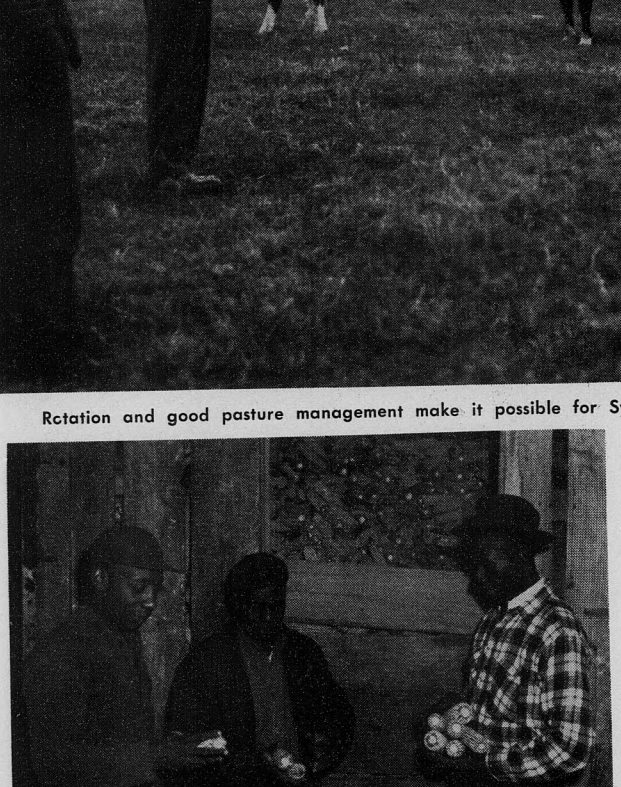
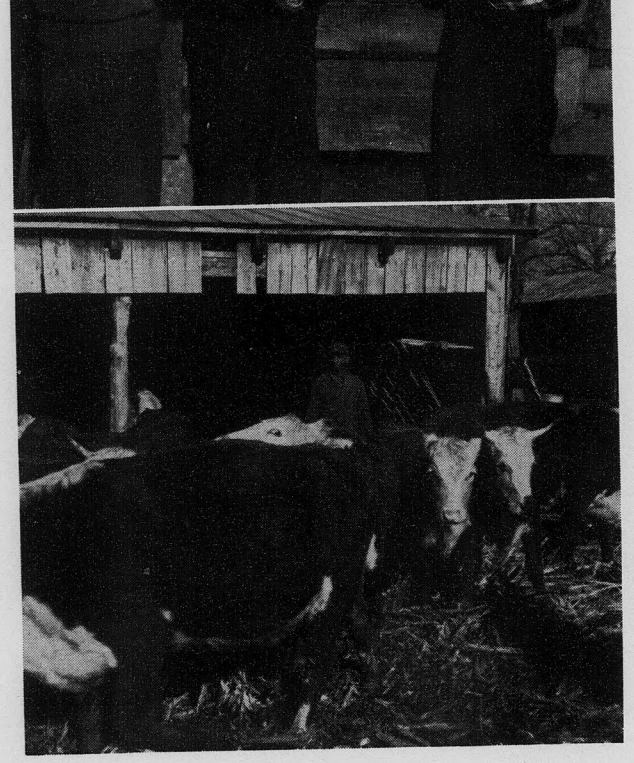
Rctation and good pasture management make it possible for Sydney Moore to provide hay and pasture for a 20-cow beef herd.





Progress

Diversification Brings Better Living to Brandywine Family

Extension work with Maryland's Negro farmers has meant more than growing better livestock or crops or better clothes the women made for themselves.

It means a new and better living for the family for today and promise of a better tomorrow.

To the Sydney Moore's of Brandywine it means that three of their 11 children are now in college and the modernizing job now going forward in their home.

To Mrs. Sylvia N. Stephens of Lakeland, it means her modern home but more important, the broadening and blossoming of her life. Coming from the West Indies 17 years ago, her life was narrow, indeed. She is now president of the Prince Georges County Council of Homemakers Clubs.

It is estimated that the work of the 13 Maryland Negro Extension agents brought about 4,826 "practice changes for the better." In doing this work, the agents made 3,930 farm and home visits, conducted 671 method demonstrations attended by 9,749 persons. Enrollment in Negro 4-H clubs is now 2,487, in homemakers clubs, 1,329.

Above: Better corn growing practices enable Mr. Moore to produce enough corn for most of his feed needs. He grows 300 to 500 broilers yearly and keeps 100 laying hens.

Below: Mr. Moore started five years ago with four Hereford heifers and a scrub bull. Now he has 19 good cows and a prize bull.

Mr. Moore had grown tobacco for years as a one-crop farmer. After he was shown how he might diversify to improve his income, he and the county agent worked out a farming plan which allowed him to go into beef cattle, broilers and sweet potatoes.

It was possible to build and maintain sufficient hay and pasture for his herd and still continue tobacco growing.

He has sold more than 100 calves and steers the past year. Last year, he produced 1,700 bushels of sweet potatoes.

All of this added income has enabled the Moore family to live better, send their children to school and improve their home.

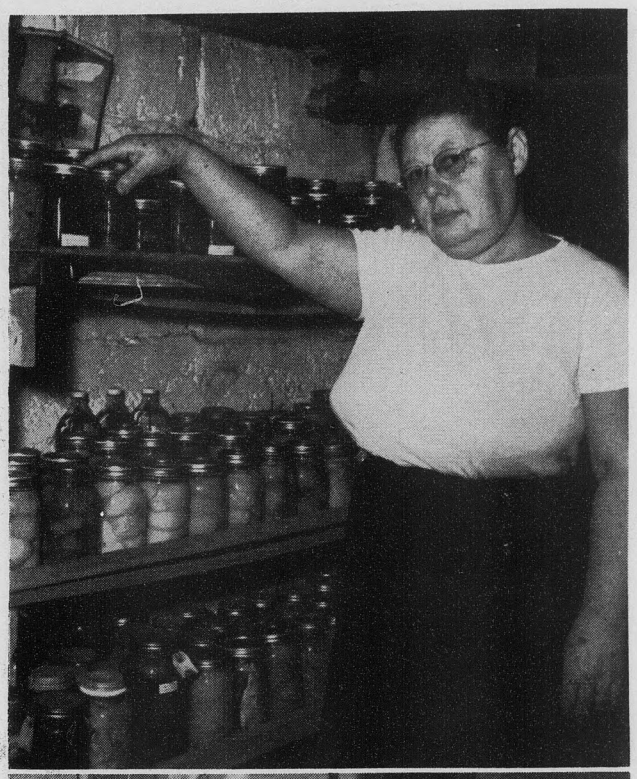
"Since we married 17 years ago, we've had to live on a strict budget," says Mrs. Sylvia N. Stephens of Lakeland.

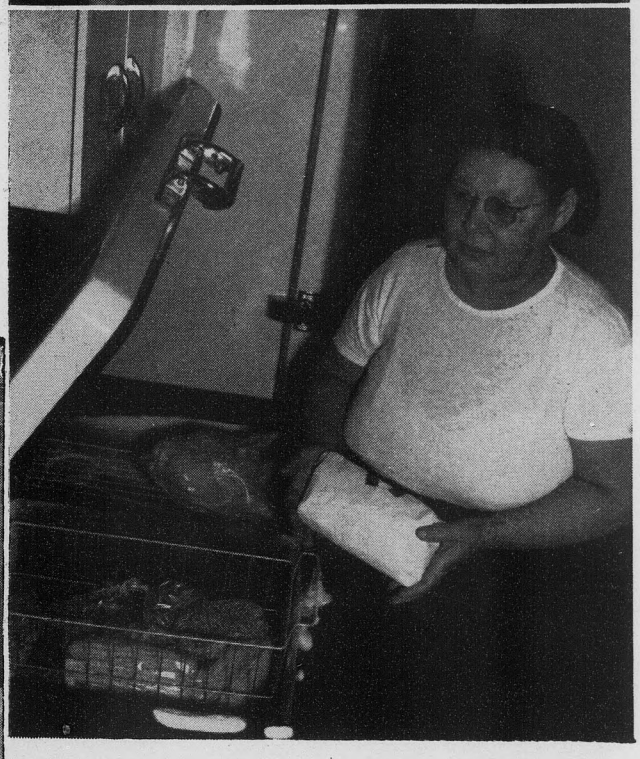
Shortly after coming here, Mrs. Stephens joined an Extension Homemaker club. She learned how to garden successfully and how to can, freeze and otherwise preserve foods, arts which were entirely unfamiliar to her.

She learned to buy food in season or while prices were low and to can or freeze for use when prices were high.

These food practices, together with learning to sew, all help cut costs which is the same as increasing income.

Homemaker club membership encouraged her to look beyond her home. It gave her the social outlet and experience everyone needs to be a "complete" person.





Top: Seventeen years ago, Mrs. Sylvia N. Stephens knew nothing of gardening or food preservation methods. Now her gardening and food "know-how" help keep down food costs. *Bottom Left:* The money to do it and study of home management enabled Mrs. Stephens to turn her old house into an attractive, convenient home. *Bottom Right:* Fishing and growing rabbits are Mrs. Stephens' hobbies. A freezer turns that recreation into "food-cost-cutters."

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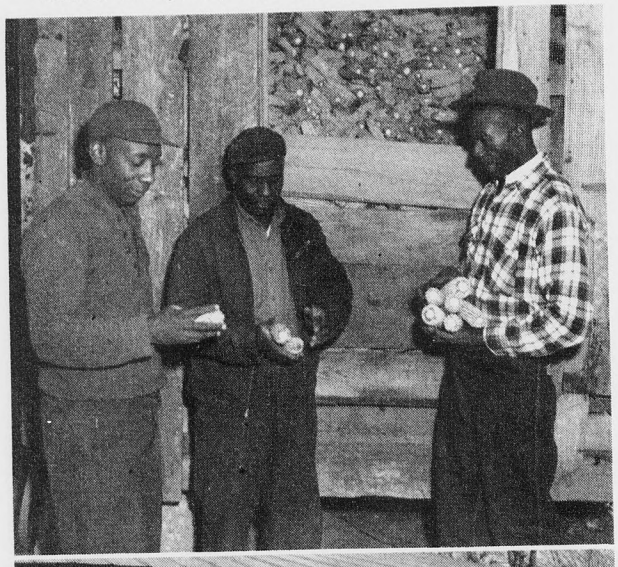

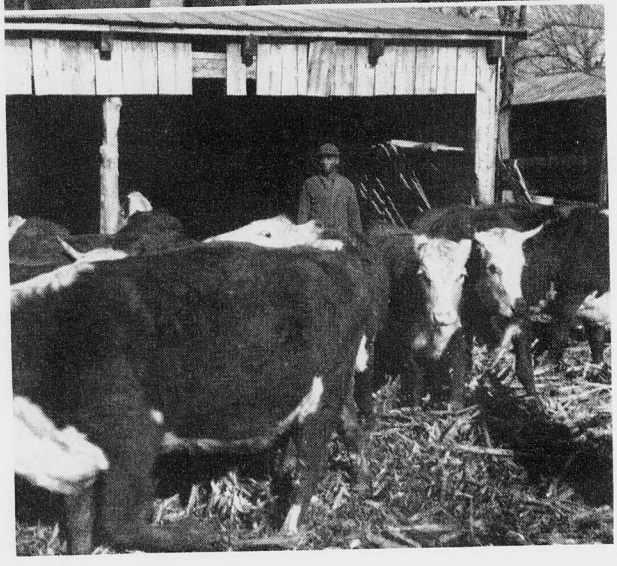

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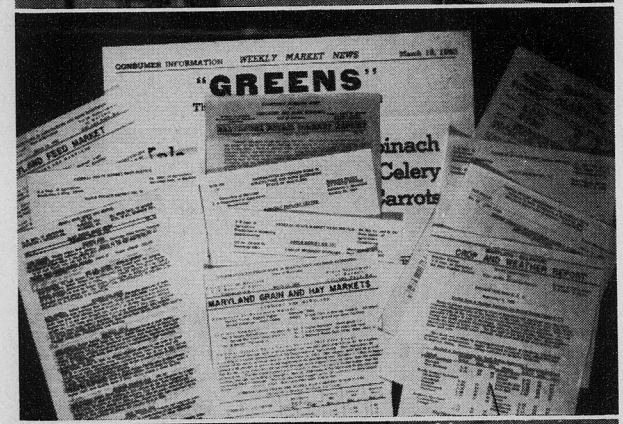


Ciphering

Grandpa's "Ciphering" Out-Moded In High Compression 1952

Farming was pretty simple business only 50 years ago. Grandpa grew his products as best he could, hauled them to market and that was it. If he did any planning or figuring, an old envelope or the barn door was good enough.

Not so in this modern age!

Farm business has become a complicated producing, marketing and distribution giant. The modern farmer is a business executive. There are hundreds of farms which represent a $100,000 investment.

To enable the farmer to carry on his business, timely market and business information are vital.

This information is supplied to Maryland farmers and the marketing industry through a joint project of the University of Maryland, the Department of Markets and the U. S. Department of Agriculture.

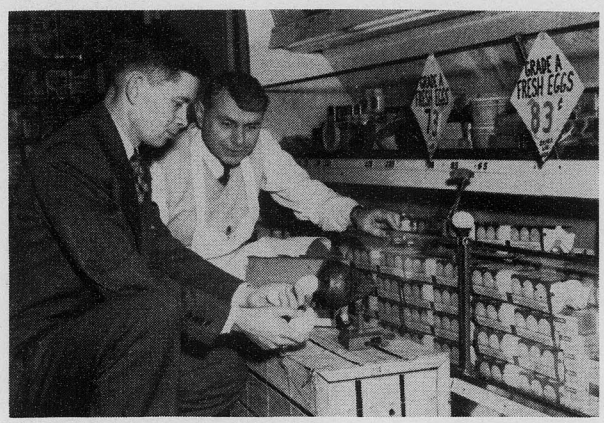
Market quotations are compiled and released daily on broilers and other fowl, eggs, dairy products, fruits, vegetables, livestock, feed, grain, hay, tobacco and special crops such as potatoes, apples and peaches.

Reporters in each market or point of production are the backbone of the service. Their work enables the farmer to learn and demand a fair price for his products.

Maryland does not produce enough eggs for its own consumers. A volume of eggs from 29 states are received on the Baltimore market.

The Maryland Grading, Sizing, and Labelling Egg law, requires that the size and grade be marked. This enables the farmer to sell his eggs on a protective quality and size basis. The housewife also knows what she's getting. Farmers lose many dollars yearly through poor packing, damage to their products or poor display of their products. Demonstrations, exhibits and other educational means bring this story to the farmer.

John E. Mahoney and Amos R. Meyer presenting the weekly radio "This Business of Farming." Market and weather reports supply vital information to Maryland agriculture. Market reporters gather information daily in Baltimore's poultry and livestock markets. Upper Right: Egg grading protects both housewife and retailer.



While it is important to know what has happened or is happening in markets, the modern business farmer needs to know what is "likely to happen." Economists bring this information through "agricultural outlook" programs.

Development of heavy machinery such as this dragline outfit operating on the Eastern Shore, has brought down the cost of drainage work, allowing many more farmers to reclaim valuable acres.

Twice the Cost

Erosion and Drainage Two Major Maryland Problems

Maryland is faced with two distinct types of conservation problems. On the Western Shore, it's erosion. On the Eastern Shore, it's drainage.

Horace S. Brauning who operates a 330 acre dairy, beef cattle and canning crops farm in Carroll county, has solved his erosion problems through grass, contour farming and conservation practices.

He gives the conservation farm plan, credit for increasing his milk production 30 per cent; crop production 40 per cent; and his pasture yield, 60 per cent. He received assistance in this plan from the local soil conservation technicians and the extension agents.

On the flat Eastern Shore, County Agent J. P. Brown in Wicomico, like other agents, has been active in promoting drainage associations, or "tax ditches."

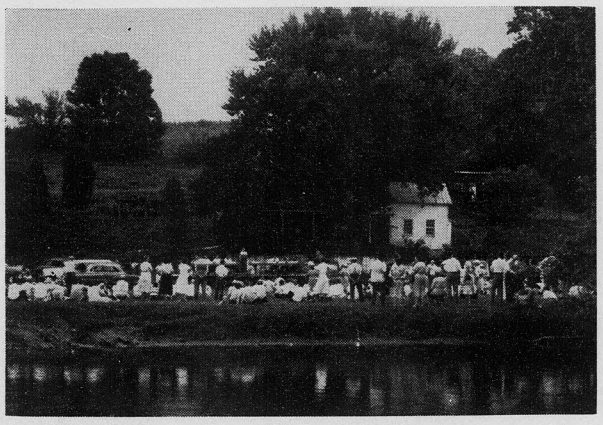
Typical of this type of work is the Mill Branch Tax Ditch in the Western part of the county. Mr. Brown started the leg work in the area five years ago. When there was sufficient interest, the association was organized.

Digging began the spring of 1951 and was completed soon afterward. The reaction of farmers along the ditch is favorable.

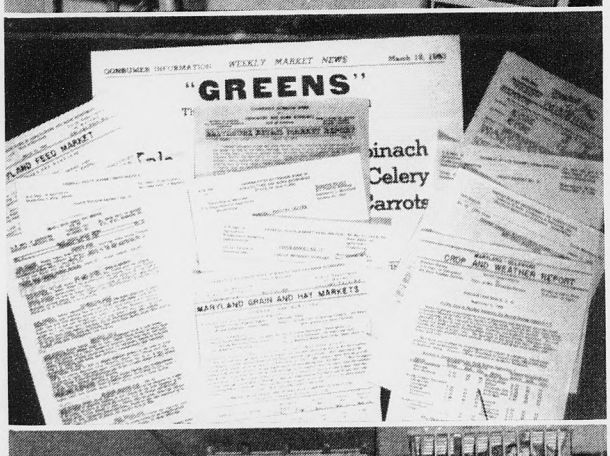
James and Howard Adkins together have 275 acres directly affected. They agree that the project was well worth what it cost.

Paul Widdowson and his son have 120 acres along the ditch, 80 of which are directly affected. They say that the value of their farm has increased about 25 per cent, due to the drainage work.

They think the ditch is worth twice what it cost.



Two hundred of the 218 families in the Deep Run-Big Pipe Creek watershed attend a conference to discuss their conservation problems. Horace Brauning who is chairman of the Carroll soil conservation district, presided at the conference.



Ciphering

Grandpa's "Ciphering" Out-Moded In High Compression 1952

Farming was pretty simple business only 50 years ago. Grandpa grew his products as best he could, hauled them to market and that was it. If he did any planning or figuring, an old envelope or the barn door was good enough.

Not so in this modern age!

Farm business has become a complicated producing, marketing and distribution giant. The modern farmer is a business executive. There are hundreds of farms which represent a $100,000 investment.

To enable the farmer to carry on his business, timely market and business information are vital.

This information is supplied to Maryland farmers and the marketing industry through a joint project of the University of Maryland, the Department of Markets and the U. S. Department of Agriculture.

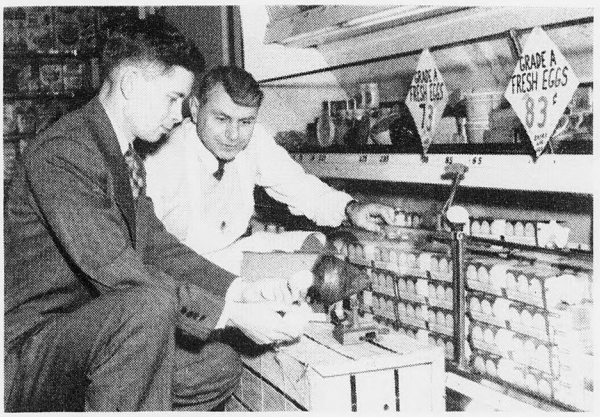
Market quotations are compiled and released daily on broilers and other fowl, eggs, dairy products, fruits, vegetables, livestock, feed, grain, hay, tobacco and special crops such as potatoes, apples and peaches.

Reporters in each market or point of production are the backbone of the service. Their work enables the farmer to learn and demand a fair price for his products.

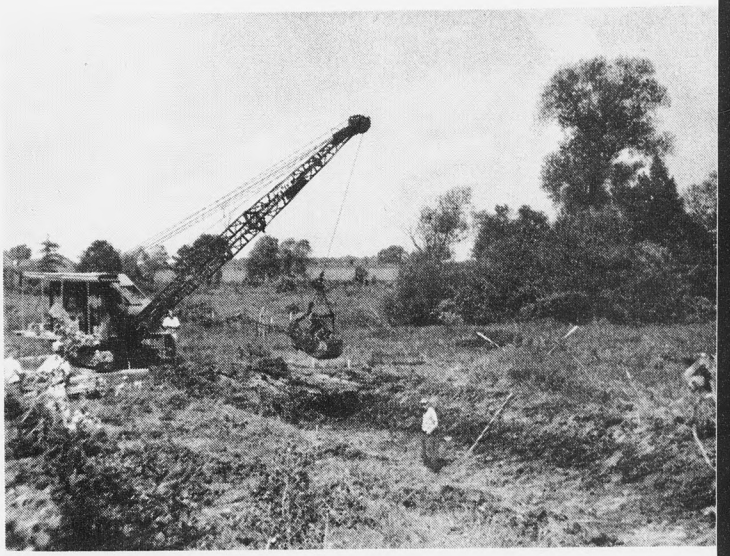
Maryland does not produce enough eggs for its own consumers. A volume of eggs from 29 states are received on the Baltimore market.

The Maryland Grading, Sizing, and Labelling Egg law, requires that the size and grade be marked. This enables the farmer to sell his eggs on a protective quality and size basis. The housewife also knows what she's getting. Farmers lose many dollars yearly through poor packing, damage to their products or poor display of their products. Demonstrations, exhibits and other educational means bring this story to the farmer.

John E. Mahoney and Amos R. Meyer presenting the weekly radio "This Business of Farming." Market and weather reports supply vital information to Maryland agriculture. Market reporters gather information daily in Baltimore's poultry and livestock markets. Upper Right: Egg grading protects both housewife and retailer.



While it is important to know what has happened or is happening in markets, the modern business farmer needs to know what is "likely to happen." Economists bring this information through "agricultural outlook" programs.



Development of heavy machinery such as this dragline outfit operating on the Eastern Shore, has brought down the cost of drainage work, allowing many more farmers to reclaim valuable acres.

Twice the Cost

Erosion and Drainage Two Major Maryland Problems

Maryland is faced with two distinct types of conservation problems. On the Western Shore, it's erosion. On the Eastern Shore, it's drainage.

Horace S. Brauning who operates a 330 acre dairy, beef cattle and canning crops farm in Carroll county, has solved his erosion problems through grass, contour farming and conservation practices.

He gives the conservation farm plan, credit for increasing his milk production 30 per cent; crop production 40 per cent; and his pasture yield, 60 per cent. He received assistance in this plan from the local soil conservation technicians and the extension agents.

On the flat Eastern Shore, County Agent J. P. Brown in Wicomico, like other agents, has been active in promoting drainage associations, or "tax ditches."

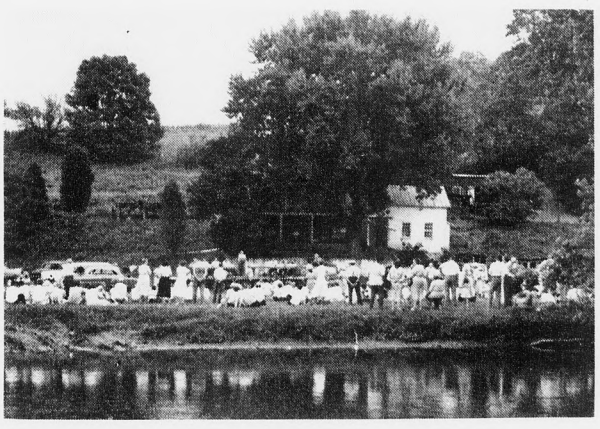
Typical of this type of work is the Mill Branch Tax Ditch in the Western part of the county. Mr. Brown started the leg work in the area five years ago. When there was sufficient interest, the association was organized.

Digging began the spring of 1951 and was completed soon afterward. The reaction of farmers along the ditch is favorable.

James and Howard Adkins together have 275 acres directly affected. They agree that the project was well worth what it cost.

Paul Widdowson and his son have 120 acres along the ditch, 80 of which are directly affected. They say that the value of their farm has increased about 25 per cent, due to the drainage work.

They think the ditch is worth twice what it cost.



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